

In the Drawings:

Please amend Figure 9 as set forth in the attached replacement sheet. Figure 9 is amended to add a --Prior Art-- legend thereto.

Remarks

In the Office Action, claims 1-12 are rejected under 35 U.S.C. §102(b) as being anticipated by JP 2001-144019 to Suzuki et al. ("Suzuki"). By this Amendment, Figure 9 has been amended to add a --Prior Art-- legend thereto.

In view of the remarks herein, Applicants respectfully request reconsideration and withdrawal of the rejection set forth in the Office Action.

Applicants respectfully submit that Suzuki does not anticipate claims 1-12.

Claims 1 and 10 are independent. Claims 2-9 depend directly or indirectly upon claim 1. Claims 11 and 12 depend directly or indirectly upon claim 10. Claim 1 is directed to a thermal processing unit, and claim 10 is directed to a thermal processing method.

Claim 1 recites that the controlling unit therein obtains target-data of flow-rate parameter of the process gas and controls the process-gas supplying mechanism according to the obtained target-data. Claim 1 recites that the target-data flow-rate parameter are determined in such a manner that a speed of the film-forming process is uniform among a plurality of batch-processes in which the numbers of substrates to be processed are different from each other.

Claim 10 recites that the method therein includes obtaining target-data of flow-rate parameter of the process gas and controlling the process-gas supplying mechanism according to the obtained target-data of flow-rate parameter of the process gas. Claim 10 recites that the target-data flow-rate parameter are determined in such a manner that a speed of the film-forming process is uniform among a plurality of batch-processes in which the numbers of substrates to be processed are different from each other.

Thus, both claims 1 and 10 recite the feature of the target-data of flow-rate parameter being determined in such a manner that a speed of the film-forming process is uniform among a plurality of batch-processes in which the numbers of substrates to be processed are different from one another. Because of this feature, film qualities of thin films may be uniform among respective batch processes, independently of the number of substrates to be processed by one batch. The instant specification teaches that:

[a]ccording to the present invention, when a thermal process is conducted to the substrates in a batch manner, the thermal process is not always conducted under a condition wherein the holder fully holds the substrates, but the thermal process may be conducted

according to the target-data of flow-rate parameter of the process gas corresponding to the number of substrates to be processed by one batch-process. Thus, even if the number of substrates to be processed by one batch-process is smaller than the number corresponding to a full-loading state, the thermal process can be conducted without filling the holder with some dummy wafers. That is, dummy wafers for fully loading become unnecessary, which reduces cost. In addition, the target-data of flow-rate parameter are determined in such a manner that a speed of the film-forming process is uniform among a plurality of batch-processes in which the numbers of substrates to be processed are different from each other. Thus, film qualities of thin films may be uniform among the respective batch processes, independently from the number of substrates to be processed by one batch.
[emphasis added] (page 3, line 24 – page 4, line 6)

Thus, because the claimed unit and claimed method are both designed to determine the target-data of flow-rate parameter in such a manner that a speed of the film-forming process is uniform among a plurality of batch-processes in which the numbers of substrates to be processed are different from each other, the film qualities of thin films may be uniform among the respective batch processes, independently of the number of substrates to be processed by one batch.

Applicants respectfully submit that Suzuki does not teach or suggest the aforementioned feature. Suzuki does not teach anything relative to the speed of the film-forming process. In addition, Suzuki is concerned with film thickness rather than with film quality.

Therefore, because Suzuki does not teach or suggest a thermal processing unit or method that is configured to determine target-data of flow-rate parameter in such a manner that a speed of the film-forming process is uniform among a plurality of batch-processes in which the numbers of substrates to be processed are different from one another, Applicants submit that Suzuki does not anticipate instant claims 1-12.

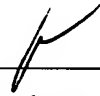
In view of the remarks herein, Applicants respectfully request that the rejection set forth in the Office Action be withdrawn, and that claims 1-12 be allowed.

If any fees under 37 C. F. R. §§ 1.16 or 1.17 are due in connection with this filing, please charge the fees to Deposit Account No. 02-4300, Order No. 033082R251.

Respectively submitted,

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Enclosure: Replacement Sheet for Fig. 9
DCR/MM/cvj